

Executive Summary
Rebuttal Testimony of Don J. Wood

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Clerk's Office
N.C. Utilities Commission

The purpose of my rebuttal testimony is to respond to the direct testimony of BellSouth witnesses Debra Aron, Randall Billingsley, Pamela Tipton, John Ruscilli and James Stegeman.

The testimony of these witnesses supports BellSouth's analysis of the *potential* for competitive entry by CLECs to provide services to mass market customers in certain BellSouth-defined geographic markets, and to do so by self-provisioning the necessary local switching facilities. I am responding specifically to the claim by Dr. Aron that, based on the results of the BellSouth analysis, the Commission should conclude that CLECs are not impaired without access to the local circuit switching UNE. Dr. Aron makes the claim that this analysis supports a conclusion that CLECs are not impaired in 5 of the BellSouth-defined markets. The FCC has made it clear that an analysis of potential deployment must consider both operational and economic barriers. AT&T witness Mark Van de Water addresses operational impairment issues in his testimony. My testimony focuses on economic barriers to market entry, and addresses the BellSouth model used to conduct its analysis and the inputs and assumptions that BellSouth chose to use with that model.

A closer review of the BellSouth "economic impairment" analysis reveals that limitations in the computer model used (the BellSouth Analysis of Competitive Entry,

or "BACE" model sponsored by Mr. Stegeman) and conflicting and nonsensical inputs to that model (sponsored by Drs. Aron and Billingsley) have created a highly distorted version of reality that offers no basis whatsoever for a conclusion that CLECs' efforts to provide services to mass market customers are not impaired without access to UNE switching.

The structural limitations of the model cannot be corrected, and BellSouth has refused a request to make the source code available in a usable format that may have permitted a correction to some of these problems. Because of the model limitations, it is impossible in many cases to populate the model with meaningful input values. Making all of the corrections required to bring the BACE in line with reality is ultimately unnecessary, however: my analysis of the BellSouth inputs shows that even minor changes to certain key inputs causes the reported Net Present Value of CLEC entry using self-provisioned local switching to be negative. In other words, with even modest input corrections the BACE confirms the actual facts "on the ground": economic barriers exist to CLEC entry via self-provisioned local switching that make such an investment uneconomic. Prudent, rational CLEC management will not seek to make these investments, and prudent, rational investors will not make the capital available to do so.

Before considering the results of any analysis of "potential deployment," it is important to put this question into the proper context. In the TRO, the FCC made the unambiguous conclusion that, on a national level, carriers are impaired without access

to unbundled local circuit switching when service mass market customers. Despite this determination, the FCC created an opportunity for ILECs to demonstrate, if they can, that no impairment exists in specific, geographic markets. It is important to note that any consideration of "potential entry" is made only after the Commission concludes that "actual entry" has not occurred, even though CLECs have been, and continue to be, motivated to utilize their own network facilities wherever feasible. Any assertion by BellSouth that competition for mass market customers using self-provisioned local switching can *potentially* exist, even though it does not *actually* exist, should be carefully examined before being relied upon.

BellSouth conducts its analysis of "economic" impairment using its new BACE model. This analysis is fundamentally flawed for several reasons. First, the model "locks in" several important assumptions. Important price assumptions are preprocessed and cannot be changed, or even directly examined, by the user. Equally importantly, the model is designed to permit an analysis to be performed *only* over a ten-year time horizon. The user has no ability to consider a shorter investment horizon that a rational investor would consider before making an investment in a large, fixed asset such as a local circuit switch.

BellSouth's inputs to the BACE are likewise flawed, and overstate the likely revenues that a CLEC would receive in two ways. BellSouth has failed to properly consider how its retail prices for services to mass market customers vary across its service territory, causing its initial price assumptions to be flawed and rendering its

attempt to segment customers based on spending levels meaningless. More importantly, BellSouth has failed to consider how prices will change over the time horizon of its analysis. In addition to inflated prices, BellSouth assumes a total market that is too large CLEC markets shares that far exceed those experienced to date, and a rate of customer acquisition for CLECs that exceeds anything previously experienced in the industry. Finally, BellSouth assumes a scope of CLEC service offerings that may not represent the services that the CLEC seeks to offer, and even if offered, does not represent the opportunity for cost recovery assumed by BellSouth.

BellSouth also understates the costs that a CLEC would incur. BellSouth's analysis includes revenues from a broad array of services but includes the sales costs associated with only a subset of those services. The G&A costs assumed by BellSouth are based in part on companies with a much greater customer density in the markets being studied, and understate the costs that an efficient CLEC would incur. Most importantly, BellSouth has grossly underestimated the likely cost of capital to a CLEC seeking to self-deploy local circuit switching. After arguing that a CLEC utilizing UNEs incurs less risk than a CLEC investing in its own network infrastructure and after noting that CLECs who made investments in large, fixed network assets to serve mass market customers in the past are now largely bankrupt, BellSouth assumes that a CLEC that invests in local circuit switching will incur *less* risk and a *lower* cost of capital in the future. By understating the cost of capital, BellSouth understates the discount rate applied in its Net Present Value calculation.

This causes the present value of future revenues to be overstated and results in an artificially positive reported NPV.

With changes to only a few of its unreasonable assumptions, the BACE consistently reports that CLEC deployment of local switching to serve mass market customers is uneconomic.

The FCC made clear that carriers are impaired without access to local circuit switching - the past 8 years have provided no evidence to the contrary. The BellSouth model, by virtue of its basic structure and the inputs that populate it, is an ineffective tool for making any determination about the realities of providing switching to the mass market. Finally, even when modest corrections are made to BellSouth's flawed model it is clear that impairment exists.

AT&T COMMUNICATIONS OF THE SOUTHERN STATES LLC'S
MATRIX SUMMARY OF SURREBUTTAL TESTIMONY
DOCKET NO. P-100, SUB 133q

FILED

MAR 01 2004

March 1, 2004

Clerk's Office
N.C. Utilities Commission

WITNESS	SUBJECT MATTER OF SURREBUTTAL TESTIMONY	TRO DECISIONAL CRITERIA
Jay M. Bradbury	Local Circuit Switching	47 C.F. R. §51.319(d)(2)(iii)(A)
Cheryl Bursh	Hot Cut Processes	47 C.F. R. §51.319(d)(2)(ii)
Steven E. Turner	Economic Barriers to CLEC Entry	47 C.F. R. §51.319(d)(2)(iii)(B)
Mark Van de Water	Hot Cut Processes	47 C.F. R. §51.319(d)(2)(ii)
Don J. Wood	Economic Barriers to CLEC Entry	47 C.F. R. §51.319(d)(2)(iii)(B)

Docket No.: P-100, Sub 133q
Summary of the Surrebuttal Testimony of Jay M. Bradbury

My surrebuttal testimony responds to portions of the rebuttal testimony of BellSouth's witnesses W. Keith Milner, A. Wayne Gray, Gary Tennyson, and Eric Fogle. My responses focus on the operational and economic impairments that arise from various CLP network architecture requirements, the impact of those impairments upon the CLPs, and the role of Electronic Loop Provisioning (ELP) in this docket.

BellSouth's witnesses attempt unsuccessfully to claim that certain portions of my testimony are somehow incorrect or misleading. They make specific claims regarding:

- the requirements for CLEC switch locations
- the necessity for collocations and the equipment within them
- the high price of transferring service from the ILEC to the CLEC
- the validity of comparing the transfer process to UNEP or the long distance PIC process
- the need for DLC equipment and the analysis of its "lumpy" cost requirements
- the impact of IDLC deployment on the transfer of service and the deployment of CLEC DSL services
- the potential negative impact of forced UNEL upon the tandem network
- the potential of ELP, or any other proposal with the potential to eliminate impairment.

I demonstrate in each case that the BellSouth witnesses' claims do not alter the conclusions in either my direct or rebuttal testimony.

The impairment caused by the existing legacy network technology cannot be cured by improvements to the hot cut process, be they "batch", "bulk", or "rolling" processes. AT&T's Electronic Loop Provisioning proposal is capable of curing these deficiencies, but curing the continuing impairment that AT&T believes the Commission will find exists is not an issue in this proceeding. The Commission should open a separate docket to address how to eliminate the impairment it will find in this docket.

AT&T's use of its local switches and network in North Carolina does not meet the requirements of the TRO for AT&T to be identified as a trigger in any BellSouth defined market. AT&T does not provide any mass market residential service. AT&T's universe of business customers served is 85% enterprise. The small number of very small business customers being served is an artifact of a prior failed business plan that will not be revived and that is not being used to provide service to new very small business customers. AT&T is not actively provisioning UNE-L service to very small business customers.

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MAR 01 2004

Executive Summary of the Surrebuttal Testimony

Of Cheryl Bursh

Clerk's Office
N.C. Utilities Commission

My surrebuttal testimony responds to various performance related issues raised in the Rebuttal Testimony filed by BellSouth witness Alphonso J. Varner. My recommendation to the Commission remains the same, that is: An assessment of the anticipated customer experience in an environment that excludes UNE-P is essential for determining whether CLPs will be impaired without its continued availability. Comparisons of the UNE-P versus UNE-L experience provide valuable information for that assessment. Therefore, assessing anticipated performance differences in a new environment, in which UNE-P is absent, is critical.

Executive Summary of
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Surrebuttal Testimony of Mark Van de Water

My Surrebuttal testimony responds to portions of the rebuttal testimony of BellSouth's witnesses Ken L. Ainsworth, Alfred A. Heartley, Milton McElroy Jr., Ronald M. Pate, John A. Ruscilli, Eric Fogle, and A. Wayne Gray.

Any CLP who wanted to order wholesale switching, should it become available, to use with analog UNE loops (DS0) for mass market customers would encounter the problems described in my direct testimony and the testimony of Mr. Gray. These difficulties are caused solely by BellSouth's claimed policy decision to provide unwanted protection to CLPs. If BellSouth's interest is truly to protect CLPs, as well as itself, it could require that a letter of authorization between the two company entities/CLPs be provided before service is provisioned. BellSouth does this today for DS1 or higher level of service. It simply refused to do so for DS0 service.

Those hurdles are an additional source of impairment to an already impaired UNE-L process. As such, a finding that CLPs are impaired without access to unbundled switching would certainly address the problems of being forced to use such a process.

BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
Docket No. P-100, Sub 133q

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MAR 01 2004

Clerk's Office
N.C. Utilities Commission

Executive Summary

SURREBUTTAL TESTIMONY OF
DON J. WOOD

The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of BellSouth witness Debra Aron.

Dr. Aron argues that her "interpretation" of your testimony is that you are urging the commission to disregard portions of the TRO. To the contrary, I am suggesting a more comprehensive consideration than proposed by Dr. Aron. While she urges the Commission to consider a "potential deployment" analysis in a vacuum, I am recommending that the Commission consider such an analysis as one of an interrelated series of tests. I am urging the Commission – based on its knowledge of North Carolina markets for mass market services and experience with competitive entry into those markets – to consider any "potential entry" claims within the context of that knowledge.

Dr. Aron suggests that whenever a CLP does not use its own local circuit switching equipment to serve mass market customers, it has simply chosen not to do so. Such a statement is not only flawed and unsupported, it is naive. Any meaningful analysis of why CLPs in most instances rely upon ILEC-provided local circuit switching to serve the mass market must consider the following three points:

1. CLPs have a number of incentives to pursue a UNE-L strategy, and these incentives have been present since 1996.
2. In the absence of access to UNE-P, CLPs have not deployed their own local circuit switching equipment to serve mass market customers.
3. CLPs have the necessary expertise to deploy the necessary network facilities.

A review of the factors described by Dr. Aron suggests that CLPs have not made these investments because it is not economically rational for them to do so. Results obtained from BellSouth's BACE model, described in detail later in my testimony, also support such a conclusion.

Dr. Aron argues that a CLP can utilize UNE-P in order to avoid making the investment necessary for self-deployment. While she makes every effort to tread carefully, she gets dangerously close to the right answer: CLPs rely on UNE-P because a business case that considers all relevant variables cannot be made for the higher risk entry strategy of self-deployment of local circuit switching and UNE-L to serve the mass market. As I explained in my rebuttal testimony, much of the financial risk in self-deployment is created by the fact that the CLP begins with higher unit costs than BellSouth due to both a lower market share and backhaul requirements. In this respect, BellSouth's "first in" advantage in significant and potentially insurmountable. The FCC's TELRIC methodology puts ILECs and CLPs on a more equal footing by neutralizing – to some degree – this "first in" advantage in the pricing of UNEs by equalizing the component of each carrier's cost associated with this investment risk.

A fundamental problem with BellSouth's "potential deployment" analysis is that while Dr. Aron is arguing that CLPs utilize UNE-P in order to reduce their risk to serve mass market customers, Dr. Billingsley is simultaneously arguing that CLPs investing in their own local circuit switches will experience significantly *less* risk than these same carriers have experienced when using UNE-P.¹ Dr. Billingsley's assumption that CLPs will incur less risk and a lower cost of capital when making the substantial investments necessary to self-deploy local circuit switching (and his assumption that the necessary capital will be available at any price) is absurd. Dr. Aron gets closer to the truth: because of the inherently higher risk, a business case analysis cannot support self-deployment of local circuit switching by CLPs to serve mass market customers. A business case can be made, for some geographic markets, to provide such services by utilizing UNE-P.

Dr. Aron also presents rebuttal testimony in support of the inputs of to BellSouth's BACE model. I disagree with Dr. Aron's assumptions that existing retail prices will remain unchanged until the year 2013, that BellSouth has considered revenues at a sufficient level of granularity, and that it is reasonable to expect that all CLPs offering mass market services will capture 15% of the relevant geographic market (particularly if BellSouth's win-back efforts are considered).

When conducting a business case analysis, it is important to consider the likely level of revenues and costs over the time horizon of the analysis. In a short run analysis, it may be appropriate to consider the current level of prices to be fixed. If the analysis encompasses a longer period of time (such as the BACE's immutable ten year assumption), it is necessary to consider the potential for changes in the level of revenues and costs over time. This uncertainty increases as more distant time periods are considered, thereby increasing the risk associated with these more distant expected cash flows. The consideration of projected revenues and costs – and the uncertainty associated with those expectations – is fully

¹ This assumption causes Dr. Billingsley to significantly understate the relevant cost of capital for CLPs, and subsequently causes BellSouth to utilize a discount rate in the BACE that is much too low to reflect the risks associated with the investments that it analyzes.

consistent with the FCC's conclusion (§517) that when "judging whether entry is economic," states must consider how "competitive risks affect the likelihood of entry."

BellSouth has juxtaposed assumptions of fixed price levels, with a ten year time horizon, and a discount rate based on a *lower* level of risk than CLP's currently face. Dr. Aron refers to "the requirement that the analysis be sufficiently granular to take into account the state of impairment in a particular market," and specifically cites to the FCC's conclusion (§ 485) that an appropriate analysis must consider "the significant variation in the costs and revenues an efficient entrant is likely to face." Unfortunately, the BACE does not (and based on its construction, cannot) do this. BellSouth's existing retail prices for mass market customers are characterized by areas of high rates and low costs, exactly the kind of relationship that the FCC found to be unsustainable. BellSouth's prices and reported costs vary at the wire center level. The price assumptions in the BACE, however, cannot be changed at this level of granularity. Dr. Aron's assertion (p. 16) that it is necessary "to reflect the unique characteristics of the North Carolina customer base" is an accurate description of what a business case model *should* do, but an inaccurate description of what the BACE *can* do.

Dr. Aron states that an ultimate market share of 15% is assumed for each CLP. A review of BellSouth's base run assumptions, however, indicates that the actual assumptions range from 7.53% to 20.12% for residence customers and 3.6% to 32.85% for 1-3 line business customers. If 15% is Dr. Aron's magic number, it is unclear why BellSouth has not actually used it in the BACE.

Dr. Aron's testimony, particularly when compared to Ms. Tipton's, suggests that her assumptions are unlikely to prove true. Ms. Tipton shows between six and seven CLPs in each market using self-provisioned local switching (assuming that some carriers are utilizing UNE-P instead, the actual number of CLPs is therefore likely to be higher). In ten years, Dr. Aron's assumptions yield a total CLP share of the market of between 90% and 105% of the total market.

Dr. Aron fails to incorporate additional relevant information. She does not discuss (and makes no indication that she has considered) that the customers willing to leave BellSouth are likely to be enticed back to BellSouth's due to "win-back" offerings. In its Fourth Quarter 2003 *Investor Relations Competitor Earnings Update*, BellSouth CFO Ron Dykes is quoted as saying that "BellSouth is on the 'bleeding edge' in terms of aggressiveness in win-backs for UNE-P competitors," and that BellSouth has "won back 40% of its consumer losses and more than 60% of its business losses." If BellSouth is "on the bleeding edge of aggressiveness" in its efforts to win back customers from UNE-P providers (customers for whom it receives wholesale revenue to recover network costs), it is reasonable to expect that BellSouth would be somewhere beyond the "bleeding edge of aggressiveness" in its attempts to win back customers from a CLP utilizing self-deployed local circuit switching (customers for whom it receives no revenue).

Based on BellSouth's existing on-but-not-yet-beyond the bleeding edge of aggressiveness win-back offerings, it has been able to entice about half of the customers won by CLPs to return. In other words, a CLP must win two customers from BellSouth in order to keep one. Assuming that Dr. Aron's assumptions about a CLP's ability to attract customers are accurate (as described above, a generous assumption), the BACE has overstated both the rate of customer acquisition and ultimate CLP market share.

While the structure of the BACE makes it impossible to reflect all relevant revenue and cost information with sufficient granularity to perform a meaningful business case analysis, it is possible to consider the impact that certain BellSouth assumptions have on the results. These results can be summarized as follows:

If prices are assumed to decrease by 5.1% per year, and no other changes are made to BellSouth's assumptions, the reported NPV declines to negative 68 million.

If Dr. Billingsley's CLP-specific cost of capital is used, and no other changes are made to BellSouth's assumptions, the reported NPV declines by 78%.

If the CLP market penetration assumptions are adjusted to reflect the impact of BellSouth's win-back pricing, and no other changes are made to BellSouth's assumptions, the reported NPV declines by 73%.

BELLSOUTH TELECOMMUNICATIONS, INC.

(Docket No. P-100, Sub 133q: TRO → UNE-P)

The NCUC is Providing the Direct, Rebuttal, and Surrebuttal Matrices of Issues and Executive Summaries for the Following BellSouth Witnesses:

Kenneth L. Ainsworth - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
Dr. Debra J. Aron - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
Dr. Randall S. Billingsley - Direct (1/9/04), Surrebuttal (3/1/04)
Eric Fogle - Rebuttal (2/16/04), Surrebuttal (3/1/04)
A. Wayne Gray - Rebuttal (2/16/04), Surrebuttal (3/1/04)
Alfred A. Heartley - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
Milton McElroy Jr. - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
W. Keith Milner - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
Ronald M. Pate - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
Dr. Christopher Jon Pleatsikas - Dir (1/9/04), Rebut (2/16/04), Surrebutt (3/1/04)
John A. Ruscilli - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
James W. Stegeman - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)
Gray Tennyson - Rebuttal (2/16/04)
Pamela A. Tipton - Direct (1/9/04), Surrebuttal (3/1/04)
Alphonso J. Varner - Direct (1/9/04), Rebuttal (2/16/04), Surrebuttal (3/1/04)

FILED

JAN 09 2004

**BELLSOUTH TELECOMMUNICATIONS, INC.'S
MATRIX SUMMARY OF POSITIONS
DOCKET NO. P-100, SUB 133q**

Clerk's Office
N.C. Utilities Commission

WITNESS	SUBJECT MATTER OF TESTIMONY	TRO DECISIONAL CRITERIA
Kenneth L. Ainsworth	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Dr. Debra J. Aron	Potential deployment test	47 C.F. R. §51.319(d)(2)(iii)(B)
Randall S. Billingsley	Economic barriers to CLEC entry	47 C.F. R. §51.319(d)(2)(iii)(B)(3)
Alfred A. Heartley	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Milton McElroy	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
W. Keith Milner	Potential deployment test	47 C.F. R. §51.319(d)(2)(iii)(B)(3)
Ronald M. Pate	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Dr. Christopher Pleatsikas	Geographic market area	47 C.F. R. §51.319(d)(2)(i)
John A. Ruscilli	Overview and introduction of BellSouth's direct case	47 C.F.R. §51.319(d)(2)(ii) and (iii)
James W. Stegeman	Economic Model – BellSouth's Analysis of Competitive Entry ("BACE")	47 C.F. R. §51.319(d)(2)(iii)(B)
Pamela A. Tipton	Local switching triggers	47 C.F. R. §51.319(d)(2)(iii)(A)
Alphonso J. Varner	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)

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JAN 09 2004

BELLSOUTH TELECOMMUNICATIONS, INC.

EXECUTIVE SUMMARY OF KENNETH L. AINSWORTH

Clerk's Office
N.C. Utilities Commission

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, SUB 133Q

JANUARY 9, 2004

In my testimony, I demonstrate two main points: (1) BellSouth has in place a proven, seamless, high quality individual hot cut process to handle Unbundled Network Element Loop ("UNE-L") in volumes likely to result if BellSouth obtains full relief from unbundled circuit switching; and (2) BellSouth has in place a batch hot cut process that provides additional ordering efficiencies and the same proven, seamless, quality migrations as individual hot cuts to convert the embedded base of Unbundled Network Element Platform ("UNE-P") arrangements to UNE-L arrangements if BellSouth obtains full relief from unbundled circuit switching.

Specifically, I will describe that provisioning a hot cut is not a difficult or cumbersome process because, simply defined, a hot cut is moving a jumper from one location to another. The hot cut itself involves basic network functions and skills that are used repeatedly in BellSouth's network every day. The extensive number of customers being served in North Carolina by a combination of a BellSouth loop and a Competitive Local Provider ("CLP") switch demonstrates that BellSouth has a hot cut process that works.

I will also address the general overview of BellSouth's different hot cut processes and the types of hot cut processes and types of coordination levels BellSouth offers to CLPs. There are three (3) different types of hot cut processes BellSouth offers:

1 individual, project, and batch hot cut processes. In addition, BellSouth offers CLPs
2 three (3) hot cut coordination levels: coordinated / time specific, coordinated, and non-
3 coordinated.

4

5 Throughout my testimony, I describe the effects and benefits resulting from the various
6 hot cut processes and coordination levels associated with each process that indicates
7 BellSouth has a seamless hot cut process that ensures minimal end-user service
8 outage. Further, I address the coordination between BellSouth and the CLPs from the
9 initial request to the final acceptance by the CLP.

10

11 Other areas of concern that I discuss consist of the effectiveness of the hot cut
12 processes, BellSouth's performance on hot cuts, the scalability to meet load demand,
13 and the staffing of the Local Carrier Service Center ("LCSC") and Customer Wholesale
14 Interconnection Services ("CWINS") Centers. Last, but not least, I note that BellSouth's
15 hot cut processes are regional, and BellSouth performs its hot cut processes the same
16 way in all nine of its states.

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18 This concludes my summary.

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JAN 09 2004

Clerk's Office
N.C. Utilities Commission

Docket No. P-100, Sub 133q

DR. DEBRA J. ARON

BELLSOUTH TELECOMMUNICATIONS, INC.

The FCC's Triennial Review Order ("TRO") requires state commissions to determine whether CLPs ("Competitive Local Providers") would be "impaired" in the provisioning of local exchange service if access to the incumbent local exchange carrier's ("ILEC's") unbundled local switching were not available. The FCC prescribes two ways that state commissions are to conduct this analysis. First, the FCC designed a "bright-line" test consisting of certain "triggers" which, if met in a given geographic market, mandates a finding that CLPs are not impaired (within the TRO's meaning of that term) in that geography. BellSouth has conducted the analysis required by the triggers test, and the results of that analysis are provided in the direct testimony of Pamela A. Tipton.

In those geographic markets where the FCC's switching triggers are *not* met, there is an alternative test that state commissions must apply to determine whether CLPs are impaired without access to unbundled local switching. This alternative analysis is referred to as the "potential deployment" approach to determining impairment, and it involves considering three factors: evidence of actual deployment, potential operational barriers, and potential economic barriers. (47 C.F. R. 51.319(d)(2)(iii)(B).)

The purpose of my testimony is to address the issue of whether there are economic barriers in those geographic markets in North Carolina where the FCC's switching triggers are not met that would impair a CLP's ability to provide local exchange service if it lacked access to unbundled switching. My testimony addresses the economic foundation upon which such an examination of potential economic barriers should be based. I note that the FCC requires that such an analysis use a "business case" approach. I conclude that the appropriate analysis based on a business case that the FCC requires involves the determination of the net present value of the expected revenues and costs that could be expected if a CLP were to enter a particular market using its own self provisioned switching. I then discuss the economic model that BellSouth has submitted (the BACE model) and how this model accurately captures the analysis required by the potential deployment test as established by the FCC.

I also discuss a number of key inputs that I have provided to the model, such as the expected penetration that CLPs could be expected to achieve over the time period analyzed, the appropriate churn rate for customers, and the appropriate cost of customer acquisition, as well as the appropriate level of such factors as "general and administrative costs." I explain how I developed the values that I recommend for these inputs.

Finally, I provide the results of running the BACE model for the markets in North Carolina using the inputs that I and others have provided. I have determined that by using the potential deployment test established by the FCC, there are five geographic markets in North Carolina where the FCC switching triggers test is not met, but where CLPs would still not be impaired without access to BellSouth's unbundled switching. Those market areas are Asheville Zone 1, Goldsboro Zone 1, Hickory-Morganton (NC/TN) Zone 1, Wilmington Zone 1, and Raleigh-Durham-Chapel Hill Zone 2.

FILED

**BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. P-100, SUB 133Q**

JAN 09 2004

**Clerk's Office
N.C. Utilities Commission**

EXECUTIVE SUMMARY

**DIRECT TESTIMONY OF
DR. RANDALL S. BILLINGSLEY, CFA**

The purpose of my direct testimony is to provide an estimate of the forward-looking costs of capital for the representative competing local provider (CLP) company modeled in the BellSouth Analysis of CLP Entry (BACE) model. My testimony provides the appropriate costs of capital to be used in the BACE model, which determines whether any lack of access to BellSouth Telecommunications' (BST) switch unbundled network element (switch UNE) makes entry by a CLP uneconomical. More specifically, the costs of capital presented in my testimony are for use in calculating the net present value (NPV) of the cash flows generated by the products of the representative CLP entering the North Carolina market, as measured in the BACE model. Accordingly, I provide evidence concerning the representative CLP's forward-looking cost of equity, cost of debt, and overall cost of capital. The capital cost estimates I provide are all stated on a before-tax basis. Importantly, the after-tax cash flows produced by the BACE model must all be discounted at after-tax capital costs.

Given the data problems resulting from the current troubled environment facing the CLP industry, I essentially provide "ceiling" and "floor" estimates of the industry's capital costs. Thus, I use two surrogates to measure the representative CLP's capital costs. I use the Standard & Poor's Composite 500 Index (S&P 500) as a lower-bound estimate of the representative CLP's cost of capital and I also use a sample of publicly-traded CLPs that provides an upper-bound estimate of the representative CLP's cost of capital. I then provide a reasonable estimate of the industry's overall capital costs by averaging the results of my two approaches.

For the S&P 500 surrogate I apply the discounted cash flow (DCF) model to the firms in the S&P 500 to measure the cost of equity of average-risk firms operating in a competitive environment. Reliance on the S&P 500 is based largely on the FCC's recent clarification that the index is a "... useful benchmark for the risk faced on average by established companies in competitive markets" (Verizon Arbitration Order, p. 41, §90,). Thus, I apply the DCF model to the S&P 500 to provide a conservative, market-determined cost of equity capital estimate for the representative CLP. This is the derivation of the cost of capital that I believe should form the floor for any analysis of the cost of capital for the representative CLP.

For the surrogate composed of a group of publicly-traded CLPs, I apply the capital asset pricing model (CAPM) to estimate the cost of equity capital. Because the average cost of equity for this sample reflects the severe financial distress of the industry, it provides an upper-bound estimate of the representative CLP's sustainable, efficient cost of equity. I cannot use the DCF method on this sample because these CLPs do not pay dividends.

The appropriate cost of debt is determined for each of my two surrogates. First, I determine the cost of debt for the representative CLP using the current yield on the average bond rating category of firms in the S&P 500. Second, I estimate the cost of debt using the average bond rating for firms operating in the CLP industry. I rely on the average market value-based capital structure for each of the two surrogates. Averaging the costs of equity, the costs of debt, and the capital structures of the two surrogates provides a reasonable estimate of the overall pre-tax cost of capital for the representative CLP that should be used in the BACE business case model.

My analysis indicates that a forward-looking cost of equity estimate for the representative CLP using the DCF and CAPM approaches is an average of 17.55%. I also find evidence that the cost of debt of the representative CLP is an average of 9.92%. The average market value-based capital structure of firms is 58.50% debt and 41.50% equity. Combining this average capital structure with the above average costs of debt and equity produces an average pre-tax overall cost of capital for the representative CLP of 13.09%.

In summary, I recommend that the Commission use a *before-tax* overall cost of capital of 13.09% to discount the cash flows produced by the BACE business case model. As noted above, the capital cost estimates I provide are all stated on a before-tax basis. The after-tax cash flows produced by the BACE model must be discounted at after-tax capital costs so as to produce a reliable NPV estimate.

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JAN 09 2004

BELLSOUTH TELECOMMUNICATIONS, INC.
EXECUTIVE SUMMARY OF ALFRED A. HEARTLEY
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
JANUARY 9, 2004

Clerk's Office
N.C. Utilities Commission

My name is Alfred A. Heartley and my business address is 754 Peachtree Street, Atlanta, Georgia 30308. My title is General Manager – Wholesale Performance and Regional Centers. I graduated from North Carolina State University in 1971 with a BS Degree in Applied Mathematics. I have over 32 years experience in the telecommunications industry working for BellSouth.

The Purpose of my testimony is to explain how the BellSouth Network Services organization is prepared to scale the network operations to provide seamless, cost-effective hot cuts in volumes likely to be presented if BellSouth obtains full relief from providing unbundled circuit switching. Second, I will demonstrate that the network operations portion of BellSouth's hot cut processes is regional.

BellSouth provides service to both retail and wholesale customers through its Network Services organization, which is responsible for performing the actual provisioning, maintenance, and repair of customer services within the nine BellSouth states. In the single or batch hot cut process the central office operations employees will perform the actual central office wiring required to perform the hot cut. The installation and maintenance employees will perform any wiring changes required in the outside plant network to perform the hot cut. Network Services is prepared to move personnel to

locations requiring additional staffing if the local employees cannot handle the increased load. As the FCC recognized in BellSouth's section 271 proceedings, BellSouth's network forces and network processes and procedures are regional.

BellSouth has run force models to forecast the additional load necessary in the centers and in network operations if BellSouth receives relief from unbundled switching.

BellSouth made various assumptions about the volume of UNE-Loops in its forecast. In each instance, however, BellSouth took the highest expected volumes to generate a "worst-case" view of UNE-L volume. The model generated a maximum load of 44 hot cuts in a central office per business day. The total hot cut load per day for all central offices in North Carolina under BellSouth's worst-case view is 1120. Based on this load, the model yielded a force increase of an additional 121 central office employees and 68 installation and maintenance employees in North Carolina.

BellSouth is prepared to hire and train the 189 additional technicians in North Carolina if necessary. This process will only require 4-5 months. The transition period in the order is almost 2 years. Network Services does not foresee a problem in handling the UNE-P to UNE-L transition and the UNE-L ongoing load in North Carolina if unbundled switching relief is granted.

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BELLSOUTH TELECOMMUNICATIONS, INC.
EXECUTIVE SUMMARY OF MILTON MCELROY JR.
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, Sub 133Q

JANUARY 9, 2004

Executive Summary

The purpose of my testimony is to demonstrate that BellSouth's Bulk Migration Process of Unbundled Network Element Platform ("UNE-P") service to unbundled loop ("UNE-L") service is both seamless and effective. BellSouth had no significant commercial data with which to demonstrate the efficiency and viability of the bulk migration process other than the extensive performance data demonstrating the effectiveness of its individual hot cut process. Therefore, BellSouth engaged PricewaterhouseCoopers ("PwC") to perform an independent third party test through an attestation examination where BellSouth would make assertions and PwC would test the assertions to determine if they were valid. BellSouth selected PwC because of the Commission's familiarity with PwC's work resulting from the regionality testing PwC conducted as part of BellSouth's 271-approval process. This Commission, along with the Federal Communications Commission ("FCC"), relied upon PwC's objective and professional findings as part of its 271 decision.

BellSouth made two (2) assertions. First, BellSouth asserted that its Bulk Migration Process enables a Competing Local Provider ("CLP") to migrate multiple end-users from UNE-P service to UNE-L service. In order to facilitate the test, BellSouth created a

1 pseudo-CLP. The pseudo-CLP submitted multiple bulk order requests following the
2 written procedures provided to the CLPs on the BellSouth website.

3
4 BellSouth made the second assertion to provide proof that the Bulk Migration Process
5 applies ubiquitously across the BellSouth region. BellSouth asserted that the Bulk
6 Migration Process requires central office and field technicians to physically perform the
7 hot cut process. This hot cut process is the very same process used for non-bulk or
8 individual hot cuts in BellSouth's nine-state region. In spite of the multiple hot cut
9 offerings, the act of performing a hot cut remains a simple, straightforward task – and
10 one that BellSouth performs at high volumes with a high degree of accuracy and speed.

11
12 During the test period, PwC did identify and list a few items that it titled deviations.
13 These deviations are thoroughly discussed in my testimony. It is important to look at
14 the total context of the PwC testing. PwC observed some 724 bulk migrations and 179
15 individual single migrations to test BellSouth's assertions. At the end of this testing
16 period, 100% of the hot cuts were successfully completed which can be attributed to the
17 numerous checks and balances that BellSouth has intentionally built into the hot cut
18 process. Because of the existence of multiple crosschecks, the omission of one (1)
19 step, as observed by PwC, does not typically derail the actual conversion. Through the
20 testing conducted by PwC, BellSouth has demonstrated that its Bulk Migration Process
21 of UNE-P service to UNE-L service is both seamless and effective across the BellSouth
22 region. The test corroborates the testimony of BellSouth's witness, Mr. Ken Ainsworth,
23 that BellSouth provides a proven, high quality hot cut process to handle the UNE-L
24 volumes that would likely result if BellSouth were to obtain full relief from unbundled
25 circuit switching.

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N.C. Utilities Commission**

BELLSOUTH TELECOMMUNICATIONS, INC.

EXECUTIVE SUMMARY OF W. KEITH MILNER

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, SUB 133Q

January 9, 2004

In my testimony, I describe the engineering and network architecture assumptions that support BellSouth's Analysis of Competitive Entry ("BACE") Model. The model describes how an efficient provider of local telecommunications service can enter the market as a facilities-based provider. I also discuss how a Competing Local Provider ("CLP") would likely develop and grow its network in order to serve mass-market customers.

Through a series of diagrams in the exhibit attached to my testimony, I will describe options available to a CLP that can be used whereby a CLP can enter a market to serve a high concentration of mass-market customers, as well as a market that is not so dense. The CLP must determine which option works best for its particular business situation. Based on the flexibility depicted in the diagrams, the CLP can also use the configurations indicated as its market grows.

I will also address other issues such as collocation requirements, possible CLP switching scenarios, and the facilities required to enter the market. Please note that the CLP must continuously manage the capacities of its collocation, switching, and transport to meet the needs of its customer base. This is no different than activities required of BellSouth to serve all of its customers, including CLPs.

1

2 This concludes my summary.

3

4

5

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

JAN 09 2004

DOCKET NO. P-100, SUB 133Q

Clerk's Office
N.C. Utilities Commission

Executive Summary of the Direct Testimony of Ronald M. Pate
of BellSouth Telecommunications, Inc., filed on January 9, 2004

The purpose of my testimony is to describe BellSouth's electronic ordering process that CLPs use to migrate batches of existing non-complex Unbundled Network Element – Port/Loop Combinations (UNE-P) Services to Unbundled Network Element – Loops (UNE-Ls), including UNE-L plus local number portability (LNP), which is part of BellSouth's entire seamless and effective process for batch migrations. BellSouth's electronic ordering process for UNE-to-UNE batch migrations allows CLPs to migrate multiple UNE-P end-users to a UNE-L offering without submitting multiple individual local service requests (LSRs). With this electronic process, a CLP can migrate 2 to 99 UNE-P accounts to UNE-L with a single submission. Depending on the conditions, each batch migration request could conceivably migrate as many as 2,475 end users as an account can include a maximum of 25 telephone numbers.

BellSouth implemented this fully-mechanized, electronic process on March 29, 2003, following the collaborative Change Control Process. When the process was put into service, BellSouth provided CLPs with the necessary documentation to ensure their successful implementation.

CLPs may use any of the three electronic ordering interfaces provided by BellSouth to submit a batch migration request. When writing the requirements for the electronic ordering process, BellSouth was able to reduce the number of data fields that CLPs must enter for each account,

thus reducing the number of entries that a CLP has to complete for each account. This results in the CLP providing certain data entries at a global level that is applicable to all accounts on the batch migration request along with the pertinent data that is specific to each individual account.

After BellSouth's systems receive the batch migration request, it first checks the entire request for basic data entry errors. If a batch migration request contains such errors, BellSouth returns it to the CLP. The CLP may then correct the batch migration request and submit a supplemental request to BellSouth.

If there are no basic errors in the batch migration request, BellSouth's systems will accept the request and will generate 2 to 99 individual LSRs, using the minimal information provided by the CLP. BellSouth's systems will then process the individual LSRs just as if they had been electronically submitted individually by the CLP. Accurate and complete LSRs flow-through BellSouth's OSS to the service order generator, which results in a firm order confirmation (FOC) to the CLP for each LSR. The service orders then move to BellSouth's downstream systems for provisioning, which is described in the testimony of BellSouth's witness, Mr. Ken Ainsworth.

Lastly, my testimony discusses the scalability of BellSouth's existing ordering OSS, which are designed to accommodate both current and projected volumes of LSRs. The Florida Third Party Test provided confirmation that BellSouth's ordering OSS responded effectively to normal, peak and stress volume testing. Further, BellSouth's commercial usage confirms the ability of BellSouth's OSS to handle high volumes.

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BELLSOUTH TELECOMMUNICATIONS, INC.

BEFORE THE

NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, Sub 133q

SUMMARY OF THE DIRECT TESTIMONY OF

DR. CHRISTOPHER JON PLEATSIKAS

JANUARY 9, 2004

Section 51.319(d)(2)(i) of the Rules promulgated by the Federal Communications Commission ("FCC") in connection with its Triennial Review Order ("TRO") requires commissions to define the "relevant geographic area" that they will use as their geographic unit of analysis in determining whether competitive local providers ("CLPs") are impaired without unbundled access to an incumbent local exchange carrier's ("ILEC's") local circuit switching to serve mass-market customers. The purpose of my testimony is to provide the appropriate, economically sound definition of these "geographic areas" for this Commission's use in this proceeding.

Based on my considerations of the factors that the FCC has outlined, I recommend that the Commission define as the relevant geographic markets in North Carolina the UNE rate zones ("UNE Zones") that this Commission has defined previously, subdivided into Component Economic Areas ("CEA") as defined by the Bureau of

Economic Analysis, a part of the United States Department of Commerce. Twenty-two markets exist in North Carolina as a result of using this definition.

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BELLSOUTH TELECOMMUNICATIONS, INC.
EXECUTIVE SUMMARY OF JOHN A. RUSCILLI
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, SUB 133Q

JANUARY 9, 2004

My testimony provides an overview of BellSouth's position on the issues that the North Carolina Utilities Commission ("Commission") will address in determining the geographic markets in North Carolina where competing local providers ("CLPs") are not "impaired" without unbundled local switching – a finding that I will refer to as "impairment" in this testimony. My testimony begins by outlining the delegation that the FCC has made to the state commissions. After discussing what the FCC has directed the state commissions to do, I introduce BellSouth's witnesses. These witnesses will explain in detail the evidence that addresses the issues that the FCC has asked the state commissions to examine, including demonstrating that CLPs are not impaired within the meaning of the Federal Telecommunications Act of 1996 ("the Act") in specific geographic areas in North Carolina. I provide information regarding certain interpretive decisions that BellSouth has made with respect to the FCC's Triennial Review Order,¹ such as using the FCC's default demarcation point for differentiating between "mass market" customers and "enterprise" customers. I also discuss the appropriate rate for batch hot cuts and address the availability of collocation in BellSouth's central offices. Finally, I address BellSouth's provisioning of co-carrier cross connects and show that these operational factors do not cause CLPs to be impaired.

¹ *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, et al.*, CC Docket No. 01-338, et al., *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, FCC 03-36, released August 21, 2003.

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JAN 09 2004

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BELLSOUTH TELECOMMUNICATIONS, INC.
EXECUTIVE SUMMARY OF JAMES W. STEGEMAN
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. P-100, Sub 133Q
JANUARY 9, 2004

Executive Summary

In its Triennial Review Order ("TRO") the FCC requires state commissions to consider whether CLPs would be economically impaired without access to UNE switching when impairment triggers have not been met. In my testimony, I describe the BellSouth Analysis of Competitive Entry (BACE) model. BACE was developed specifically to assess CLP economic impairment. My testimony provides an overview of the model development, the basic approach employed in the model, the architecture, logic, and processing of the model, the data required, and the model's reporting capability.

In order to be consistent with the FCC's TRO, an impairment model must have the following characteristics: 1) The model must be capable of granular analysis; 2) the model must allow inputs consistent with an efficient CLP business model and efficient CLP network architecture; 3) the model must incorporate all likely CLP revenues and costs; and 4) the model must perform a business case analysis using Net Present Value (NPV) calculations.

BACE satisfies these characteristics and is consistent with the TRO.

1 At its core, BACE provides a framework to determine whether a CLP can economically provide
2 telecommunication-based service, without the ability to obtain unbundled switching from the
3 Incumbent Local Exchange Carrier (ILEC). As such, BACE provides the framework to estimate
4 the revenues available to CLPs in a geographic market and the cash outlays, or costs, CLPs will
5 incur when providing services in that geographic market. The present value of the CLP costs are
6 compared to the present value of the CLP revenues for specific geographic markets to determine
7 the Net Present Value (NPV) of CLP entry for that market, using an appropriate network
8 infrastructure. BellSouth witness Dr. Debra Aron explains how a positive NPV for CLPs in the
9 geographic market being studied indicates an absence of impairment in that market.

10

11 The major sections of my testimony discuss the following topics:

- 12 1) Introduction.
- 13 2) BACE background. This includes a discussion of why the model was built, the
14 nature of its development, and the fundamental approach employed by the model.
- 15 3) A discussion of how BACE is consistent with the FCC's TRO.
- 16 4) An overview of the model architecture, various processing steps, and a
17 description of some of the advantages of BACE.
- 18 5) An overview of the BACE data requirements.
- 19 6) A discussion of price calculation in BACE.
- 20 7) A discussion of quantity calculation in BACE.
- 21 8) A discussion of revenue calculation in BACE.
- 22 9) A discussion of cost calculation in BACE, including optimization steps.
- 23 10) A discussion of tax calculation in BACE.
- 24 11) A discussion of the reports obtained from BACE.
- 25 12) A discussion of the tests performed on the BACE model.

1

2 For completeness, in addition to my testimony, I have three exhibits that explain and describe
3 BACE in more detail: the BACE Users Guide (Exhibit JWS – 2), the BACE Model
4 Methodology Manual as (Exhibit JWS – 3), and the BACE Model Source Code (Exhibit JWS-4).
5 I also provide the BACE Model itself on a CD (Exhibit JWS-5).

6

7

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I also provide data identifying the actual competition that exists in some of the geographic markets where the FCC's triggers are not met. This data supports the conclusion of other BellSouth witnesses that CLPs are not impaired without access to BellSouth's unbundled local switching in certain markets pursuant to the FCC's "potential deployment" analysis.

1 BELLSOUTH TELECOMMUNICATIONS, INC.
2 DIRECT TESTIMONY OF ALPHONSO J. VARNER
3 BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

4 FILED JANUARY 9, 2004
5 DOCKET NO. P-100 SUB 133Q

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N.C. Utilities Commission

7 **EXECUTIVE SUMMARY**

8
9 My testimony presents performance data generated by measurements
10 approved by this Commission to demonstrate BellSouth's high level of
11 performance for UNE loops, hot cuts and collocation. This high
12 performance level demonstrates that BellSouth's performance in these
13 areas is not an operational barrier to UNE-Loop (UNE-L) market entry.
14 The same PMAP process that yielded the data relied upon by this
15 Commission and the FCC to conclude that BellSouth met its section 271
16 obligations produces the data provided in this filing. I provide performance
17 results for the period October 2002 through September 2003. A detailed
18 discussion of the performance results is contained in Exhibit AJV-1.

19
20 BellSouth provides data herein not only for measurements associated with
21 installation of voice grade loops as defined in the "Provisioning" category
22 of the SQM, but for measurements in the Ordering and Maintenance &
23 Repair categories as well. These measurement results show that
24 BellSouth responds to CLP loop orders accurately and timely and
25 performs maintenance and repair activities in a nondiscriminatory manner.

1 Also, because UNE loops are terminated in collocation spaces, data for
2 collocation performance are included.

3
4 Past proceedings indicate that the CLPs typically rely on unsupported
5 anecdotal evidence or baseless guesses about the future, rather than
6 actual data, to allege poor performance by BellSouth. If that pattern
7 continues in this proceeding, the Commission should disregard the CLPs'
8 testimony and focus solely on the objective evidence of performance that I
9 present here.

10
11 In addition, I present some additional performance measurements for the
12 Commission to consider. There are a few hot cut processes that are
13 either not covered by the existing measurements or, given the anticipated
14 volume of hot cuts if switching is no longer required, that this Commission
15 may want to monitor more closely. BellSouth proposes to add a new Pre-
16 Ordering measure (PO-3, *UNE Bulk Migration – Response Time*) to
17 capture its performance in the initial stage of processing a CLP request for
18 a batch conversion and to modify four of the Ordering measurements (O-
19 7: Percent Rejected Service Requests; O-8: Reject Interval; O-9: Firm
20 Order Confirmation Timeliness and O-11: Firm Order Confirmation and
21 Reject Response Completeness) to include project managed batch hot
22 cuts that were previously excluded.

23
24 Additionally, BellSouth proposes to add one new provisioning measure (P-
25 6E, *Non-Coordinated Customer Conversions - % Completed and Notified*

1 on Due Date) to capture BellSouth's performance on non-coordinated
2 cutovers. Finally, there is one change to the measure P-6: *Coordinated*
3 *Customer Conversions Interval* to include the time to notify the CLP that
4 the cutover has been completed.

5
6 The details of these measurement additions and changes are included in
7 Exhibit AJV-2. The new measurement, P-6E, that BellSouth proposes to
8 add to the North Carolina SQM is also proposed as a new measurement
9 in the SEEM plan in both Tier 1 and Tier 2, reflected in Exhibit AJV-3.

10
11 In summary, BellSouth's loop provisioning performance, as provided
12 herein, firmly demonstrates that CLPs do not face operational barriers to
13 UNE Loop market entry. Further, BellSouth has proposed to provide the
14 Commission with even more monitoring capabilities if local switching is
15 eliminated as a UNE through the recommended changes to the existing
16 SQM included in this filing.

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FEB 16 2004

**BELLSOUTH TELECOMMUNICATIONS, INC.'S
REBUTTAL MATRIX SUMMARY OF POSITIONS
DOCKET NO. P-100, SUB 133q**

Clark's Office
N.C. Utilities Commission

WITNESS	SUBJECT MATTER OF TESTIMONY	TRO DECISIONAL CRITERIA
Kenneth L. Ainsworth	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Dr. Debra J. Aron	Potential deployment test	47 C.F. R. §51.319(d)(2)(iii)(B)
Eric Fogle	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
A. Wayne Gray	Potential deployment test	47 C.F. R. §51.319(d)(2)(iii)(B)
Alfred A. Heartley	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Milton McElroy	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
W. Keith Milner	Potential deployment test	47 C.F. R. §51.319(d)(2)(iii)(B)(3)
Ronald M. Pate	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Dr. Christopher Pleatsikas	Geographic market area	47 C.F. R. §51.319(d)(2)(i)
John A. Ruscilli	Policy issues	47 C.F.R. §51.319(d)(2)(i), (ii), and (iii)
James W. Stegeman	Economic Model – BellSouth's Analysis of Competitive Entry ("BACE")	47 C.F. R. §51.319(d)(2)(iii)(B)
Gary Tennyson	Hot cut processes	47 C.F. R. §51.319(d)(2)(ii)
Alphonso J. Varner	Hot cut processes Potential deployment test	47 C.F. R. §51.319(d)(2)(ii) 47 C.F.R. §51.319(d)(2)(iii)(B)

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BELLSOUTH TELECOMMUNICATIONS, INC.

EXECUTIVE SUMMARY

REBUTAL TESTIMONY OF KENNETH L. AINSWORTH
BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. P-100, SUB 133Q

FEBRUARY 16, 2004

In my rebuttal testimony, I respond to portions of the direct testimonies of Mr. James D. Webber and Ms. Sherry Lichtenberg on behalf of MCI, and Mr. Mark David Van de Water on behalf of AT&T with regard to BellSouth's hot cut processes. My rebuttal testimony begins by addressing the Competing Local Providers' ("CLPs") allegations regarding BellSouth's hot cut process. The CLPs generally complain about six (6) aspects of the process, each of which BellSouth has addressed: (1) Go Ahead Notifications, (2) Database impacts, (3) After hours cuts, (4) Provision of all end user lines on same day, (5) Exclusion of certain loop types, and (6) CLP-to-CLP migrations.

Next, I will also respond to CLPs' allegations concerning BellSouth's hot cut performance as to service disruptions during conversion and CLPs' erroneous claims that BellSouth's hot cut process often results in errors and delays. I emphasize that while BellSouth might, through the hot cut process, cause service disruption, the CLP has significant responsibility to ensure minimal service disruption and BellSouth is not and cannot be responsible for a CLP's actions or inactions regarding the hot cut process.

I discuss the issue of scalability and point out that if this Commission were to reach a

1 finding that CLPs are not impaired without unbundled local switching, the conversion of
2 the CLPs' embedded base of customers served by UNE-P would not commence until
3 August 2005 (over a year and a half from the time this testimony is filed) and then would
4 be migrated to the CLPs' own switches over a 21 month transition period as set out by
5 the FCC in its Triennial Review Order. Thus, BellSouth has a year and a half to get
6 ready for something that will occur over an almost two-year period. Based on a "worst
7 case scenario" I concluded that BellSouth could accommodate the volumes of hot cuts
8 resultant from such an outcome.

9
10 Other areas of concern that I respond to include the fact that Integrated Digital Loop
11 Carrier ("IDLC") lines are available to be cut via the hot cut process and that the manual
12 hot cut process is capable of sustaining volumes necessary to support Unbundled
13 Network Element Loop ("UNE-L").

14
15 Finally, I point out that BellSouth has always stated that it was willing to consider
16 specific process changes proposed by the CLPs. In an effort to be responsive,
17 BellSouth has agreed to make specific enhancements to its already-compliant Batch
18 Hot Cut Process, which should address virtually all of the CLPs' alleged criticisms of the
19 process.

20
21 This concludes my summary.
22
23
24

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BELLSOUTH TELECOMMUNICATIONS, INC. FEB 16 2004

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1 **BELLSOUTH TELECOMMUNICATIONS, INC.**
2 **BEFORE THE**
3 **NORTH CAROLINA UTILITIES COMMISSION**
4 **DOCKET NO. P-100, Sub 133q**
5 **SUMMARY OF THE REBUTTAL TESTIMONY OF**
6 **DR. DEBRA J. ARON**

7
8 My rebuttal testimony responds to the economic arguments made by Dr. Mark T.
9 Bryant on behalf of MCI, Mr. Steven E. Turner on behalf of AT&T, Mr. Don J.
10 Wood, also on behalf of AT&T, and Mr. Joseph Gillan on behalf of CompSouth.

11
12 Several of the witnesses seek to re-write, or at least have the Commission ignore,
13 the requirements of the TRO. For example, witnesses Gillan and Wood argue that
14 the “potential deployment” analysis should not be used to assess impairment, as the
15 FCC directs, but instead, that its use should be limited merely to an assessment of
16 why impairment exists—as though impairment were a foregone conclusion. The
17 Commission should reject such undisciplined advocacy. Mr. Gillan also argues
18 that substantial numbers of lines are served by UNE-P and are therefore “dependent
19 on” UNE-P. Of course, such a statement simply presumes the outcome of an
20 impairment analysis that the FCC requires states to perform. Although CLPs
21 currently may, in fact, use UNE-P rather than UNE-L to serve many of their
22 customers, presumably reflects the relative profitability of the alternatives, but does
23 not imply that using UNE-L is not economic. Thus, an argument such as Mr.

1 Gillan's is meaningless for our purposes. Indeed, the fact that relative profitability
2 (as well as feasibility) drives the CLP provisioning decision is one of the economic
3 reasons underlying the need for a potential deployment test.
4

5 Dr. Bryant similarly paints an unwarranted and dark picture of a world without
6 UNE-P. For example, Dr. Bryant (incorrectly) claims that a finding of "no
7 impairment" means that UNE-P competition will be "terminated." This is not true.
8 A finding of "no impairment" would mean that CLPs could obtain switching from
9 BellSouth at commercial prices, or that CLPs can elect to compete using UNE-L.
10

11 Both Dr. Bryant and Mr. Turner claim to present models that assess impairment.
12 However, although Dr. Bryant discusses a model that was originally created by the
13 National Regulatory Research Institute (NRRI), he does not actually provide it in
14 North Carolina. It is therefore impossible to fully evaluate the "impairment tool"
15 that Dr. Bryant advocates. Mr. Turner submits a model, but his does not comply
16 with the FCC's requirements. The FCC requires that the Commission conduct a
17 *business case* analysis, which the FCC describes as accounting for the revenues and
18 costs of an efficient CLP entering a market using the most efficient business model.
19 Mr. Turner's model completely ignores revenues. Instead, it focuses on the costs
20 that he says a CLP would face, and which (he claims) would exceed the costs
21 incurred by an ILEC. Mr. Turner's "cost disadvantage" approach was addressed,
22 and explicitly rejected, by the FCC. The FCC properly concluded that a "cost
23 disadvantage" analysis does not properly address the central issue of "impairment"

1 because it does not address whether an efficient CLP economically could enter a
2 market without access to the unbundled element. Mr. Turner's model is fatally
3 flawed at the conceptual level and is invalid for use in determining impairment
4 under the FCC's TRO.

5
6 Dr. Bryant also presents several flawed parameter estimates, including revenue,
7 customer acquisition costs, churn, and market share. Dr. Bryant notes that his
8 revenue estimate is based on national data. He does not appear to try to conform
9 his estimate to North Carolina or make any granular adjustments to this national
10 figure that might make the estimate more applicable to this case. Moreover, and
11 inexplicably, Dr. Bryant's own evidence shows that his revenue estimate is too low.
12 In fact, his proposal is lower than one of the MCI plan prices that he points to as
13 support for his estimate and MCI provides higher-priced plans as well. MCI's plan
14 prices presumably would be available to the efficient CLP seeking to enter the
15 market.

16
17 Dr. Bryant also claims that acquisition costs for an efficient CLP are \$130 per
18 customer. The basis of this estimate, according to Dr. Bryant's response to
19 discovery in Florida is, in part, provided by the experiences of wireless telephone
20 companies. As is well-known, wireless companies often underwrite the
21 consumer's cost of the handset, thereby invalidating the indiscriminate, and
22 unadjusted, use of wireless data for this purpose (and Dr. Bryant never mentions
23 making any such accommodations). Moreover, Dr. Bryant's customer acquisition

1 cost estimate is inconsistent with the churn rate he recommends. He assumes that
2 customers stay with the CLP for 12 months. This implies a customer life of about
3 half of what wireless companies experience. In other words, wireless firms may be
4 able to spend more to acquire a customer because they expect to keep their
5 customers longer than does the CLP modeled by Dr. Bryant. Moreover, the churn
6 rate that Dr. Bryant recommends for the "efficient" CLP (of approximately 10
7 percent per month) is over twice as high, in some cases, as published estimates for
8 *existing* CLPs.

9
10 I also demonstrate that Dr. Bryant's 12-month churn assumption implies a monthly
11 amortization of customer acquisition costs of about \$11 (i.e., \$130 / 12 months),
12 but that an *actual* CLP (Talk America) has had an implied customer acquisition
13 amortization cost on the order of \$5 per month. It is inappropriate to assume that
14 an *efficient* CLP would have amortized acquisition costs over twice as high as what
15 this real-world CLP has been able to achieve.

16
17 Finally, Dr. Bryant claims that the efficient CLP executing the most efficient
18 business model will have a market share of five percent. This is simply
19 inconsistent with the experience that has been seen in other markets (as, for
20 example, the successes enjoyed by (e.g.) cable companies that have pursued
21 telephone service).

FILED

FEB 16 2004

Clerk's Office
N.C. Utilities Commission

1 BELLSOUTH TELECOMMUNICATIONS, INC.
2 EXECUTIVE SUMMARY OF ERIC FOGLE
3 BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
4 DOCKET NO. P-100, SUB 133Q
5 FEBRUARY 16, 2004
6

7 The purpose of my testimony is to rebut the direct testimony of Mr. Van de Water and
8 Mr. Bradbury on behalf of AT&T Communications of the Southern States, LLC
9 ("AT&T"), and Ms. Lichtenberg on behalf of MCI WorldCom Communications, Inc. and
10 MCIMetro Access Transmission Services, Inc. ("MCI") by demonstrating that BellSouth
11 has in place a hot cut process for loops that involves Line Sharing and Line Splitting
12 xDSL services during UNE-P to UNE-L migrations. My testimony also demonstrates,
13 contrary to any suggestion of Ms. Lichtenberg, that BellSouth has voluntarily involved
14 the Competitive Local Provider ("CLP") community in the development of this process.
15

16 Even though not required by the Triennial Review Order ("TRO"), BellSouth already has
17 in place the needed processes to handle all known CLP requested migration scenarios. In
18 particular, if the CLP owns the splitter, as it is obligated to do, the CLP can cut a loop
19 from the BellSouth switch port to a CLP switch port using its own processes without
20 interruption to the DSL service. In addition, with less than 0.8% of all CLP owned lines
21 involved in line splitting or line sharing, my testimony will demonstrate that CLPs are not
22 harmd in any way with a conversion of Line Splitting via UNE Loop, UNE Port and
23 cross connects to a UNE-L.